as shown in FIG. 6A. The I/Q bus in such an arrangement is comprised of N carrier/sectors, i.e., the total number of carrier and sector combinations is N. For example, for a six-carrier, three-sector channel pool, a 36-wire I/Q bus can be configured to provide one bit for I and one bit for Q at a specified clock rate. At the input of a given one of the channel unit boards 200, an I/Q bus selector 240, in response to an I/Q routing control signal, connects the correct carrier/sector I/Q bus to the channel elements 202-1, 202-2, . . ., 202-N, as shown in FIG. 6B.--

IN THE CLAIMS

1. (Amended) A base station for use in a wireless communication system, comprising:

a plurality of channel unit boards each including a plurality of channel elements for providing processing operations for signals assigned to multiple carriers of the communication system, wherein each of at least a subset of the channel elements of at least one of the channel unit boards is assignable to each of a plurality of carriers of the system.

16. (Amended) A base station for use in a wireless communication system, comprising:

a plurality of channel unit boards each including a plurality of channel elements for providing processing operations for signals assigned to multiple carriers of the communication system, wherein each of at least a subset of the channel elements of at least one of the channel unit boards is assignable to each of a plurality of carriers of the system; and

a control computer coupled to at least a subset of the plurality of channel unit boards, the control computer being operative to assign the channel elements of the channel unit boards to particular ones of the carriers of the system.